



DIVISION OF  
CORPORATION FINANCE

UNITED STATES  
**SECURITIES AND EXCHANGE COMMISSION**  
WASHINGTON, D.C. 20549

June 15, 2012

Via E-mail

Mr. Brian Wuebbels  
Executive Vice President and Chief Financial Officer  
MEMC Electronic Materials, Inc.  
501 Pearl Drive (City of O'Fallon)  
P.O. Box 8  
St. Peters, Missouri 63376

**Re: MEMC Electronic Materials, Inc.**  
**Form 10-K for the year ended December 31, 2011**  
**Filed February 29, 2012**  
**File No. 001-13828**

Dear Mr. Wuebbels:

We have reviewed your response dated June 13, 2012 and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by amending your filing, by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your filing and the information you provide in response to these comments, we may have additional comments.

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Amendment No. 2 to Form 10-K filed March 1, 2012

1. While we note your response to our prior comments 1 and 2, to comply with Exchange Act Rule 12b-15, please further amend your Form 10-K to include the complete text of the item you amended, *Item 8. Financial Statements and Supplementary Data*, and include the required certifications. As noted in Rules 13a-14(a) and 15d-14(a) of the Exchange Act, each principal executive and principal financial officer of the issuer at the time of filing of the report (i.e., the amendment) must sign the certification. You should include an explanatory note on the cover page of the amendment to explain to investors why you are filing the required amendment.

You may contact Julie Sherman, Staff Accountant, at (202) 551-3640 or Kate Tillan, Assistant Chief Accountant, at (202) 551-3604 if you have any questions regarding these comments. In this regard, do not hesitate to contact me at (202) 551-3671.

Sincerely,

/s/ Martin James

Martin James  
Senior Assistant Chief Accountant